

Dynamic Pedagogy for Effective Training of Youths in Cell Phone Maintenance

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Abstract

The study determined dynamic pedagogies for effective training of youths in cell phone maintenance. The study was conducted in Enugu State of Nigeria. Four research questions were developed while four null hypotheses formulated were tested at 0.05 level of significance. A survey research design was adopted for the study. The population for the study was 62 which comprised of all the 46 lecturers and 16 instructors of electrical/electronic technology from two government universities in Enugu State. There was no sampling because of manageable size of the respondents. A structured questionnaire titled dynamic pedagogy structured questionnaire was used for collecting data. The instrument was validated by three experts. Cronbach alpha reliability method was adopted to determine the internal consistency of the questionnaire item; a cronbach alpha coefficient of 0.84 was obtained. Sixty two copies of the questionnaire were administered. Fifty nine copies of the questionnaire were retrieved and analyzed using mean while t-test was used to test the hypotheses of no significant difference at 0.05 level of significance. The study found that 13 dynamic pedagogies in planning, 12 pedagogies in implementing, 16 pedagogies in evaluating activities were required for training youths in cell phone maintenance and 11 motivational strategies were required by trainers for their effective performance in training the youths in cell phone maintenance. It was recommended that all the pedagogies determined in this study should utilized by trainers when training youths in cell phone maintenance. It was also recommended that trainers should be motivated using strategies identified in the study.

Keywords: Dynamic pedagogy, Training, Youths, Cell phone maintenance

Introduction

A cell phone or mobile is a long range portable electronic device for communication over long distance. Business Link (2011) reported that that a cell phone can make and receive telephone calls to and from the public telephone network which includes other mobiles and fixed-line phones across the world. It does this by connecting to a cellular network owned by a mobile network operator. Bakare (2014) stated that cell phone is a telephone that does not have wires and works by radio wave that can carry calls to anywhere. Feig-Nancy (2007) stated that cell phones and their network vary very significantly from provider to provider and country to country. However the basic communication method of all of them is through the electromagnetic microwaves with a cell base station. Current cell phones can support many latest services such as SMS, GPRS, MMS, email, packet switching, WAP, Bluetooth and many more. Most of the cell phones connect to the cellular networks and which are further connected with the public switching telephone network (PSTN).

Cell phone is vast in nature and has continued to experience changes and improvement from time to time. Bakare (2009) stated that most of the electronics (cell phones) manufactured nowadays are sophisticated and dynamic in nature. There is hardly any human activity where cell phones have not made impact. They are found useful in education, health, economic development, politics, business, security, government, transportation among others. Users of cell phones nowadays hardly locate skilled and efficient cell phone technicians to maintain their malfunctioned mobiles. This has been the major problem among the users of cell phones in the study area. Most of the users whose cell phones are bad abandoned them for the purchase of new ones. In order to find everlasting solutions to this problem, there is need to determine dynamic pedagogies for effective training of youths in cell phone maintenance.

Youth is a time of life when a person is young, especially the time before a child becomes an adult. United Nation General Assembly (1995) reported that youths are young people of 15-24 years bracket. This age range may go up to 30 years in developing countries like Nigeria. The National Youth Development Policy (2001) defined youths as people aged 18-35. The youth population according to the 2006 census is almost a hundred million. This means that they constitute more than two thirds of the country's population of 140 million. They are the backbone of the development of the country. Indeed if Nigeria is to be sustained as a viable entity, there must be a very good plan to tap the energy and resourcefulness of the youth population to fast track economic development. Energy of youths can be tapped through cell phone maintenance.

Cell phone maintenance is the activities carried out in order to restore back malfunctioned or faulty cell phones. These activities include repairing, servicing, trouble shooting, flashing and configuration of malfunctional cell phones. If the youths are exposed to training with sufficient motivation in repairing, servicing,



trouble shooting, flashing and configuration of cell phones, they are likely to take up job in cell phones maintenance for sustainable living and economic development. Training according to Gordon (1992) is a planned and systematic modification of behavior through learning event, activities and programme which results in the participant achieving the level of knowledge, skills and abilities to carry out their work effectively. Onuka (2008) viewed training as a skill acquisition process through which youths are taught new knowledge and skills and how to apply them. The author stated further that the objective of training in occupations is to assist them in acquiring relevant competencies in all aspect of any production activities so as to increase their production capacity. Training leads to productivity, productivity leads to economic growth while skills lead to employability. Training in the context of this study is the acquisition of relevant knowledge and skills in cell phone maintenance by the youths through practical teaching to enhance their entry into cell phone maintenance. Youths need to be motivated in order to partake actively in cell phone maintenance. Motivation according to Hackenbury and Hackenbury in Nnachi (2009) refers to forces acting on or within an individual to cause, initiate or direct behaviours. The author explained that motivation is a prime factor in human success on a job and it is by means of motivation that an action is taken to reach a goal. Motivation therefore is a set of one or more rewards or reinforcements packaged to activate or improve the behavior and mindsets of the youths above their present status in order to entice them into taking up occupations in the cell phone maintenance. For effective training of youths in cell phone maintenance there is need dynamic pedagogy.

Pedagogy is the act, process, or art of imparting knowledge and skill. Pedagogy is a highly complex blend of theoretical understanding and practical skill (Lovat, ACDE, 2003). Although pedagogy is sometimes seen as a nebulous concept, but Abbey (2003) described it as an essential combination of knowledge and skills required for effective teaching. Lea (2003) explained that pedagogy is either the science/theory or art/practice of teaching that makes a difference in the intellectual and social development of students. The National Board for Professional Teaching Standards (2003) defined dynamic pedagogy as the pedagogical (teaching) skills teachers use to impart the specialized knowledge/content of their subject area(s). Effective teachers display a wide range of skills and abilities that lead to creating a learning environment where all students feel comfortable and are sure that they can succeed both academically and personally. This complex combination of skills and abilities is integrated in the professional teaching standards that also include essential knowledge, dispositions, and commitments that allow educators to practice at a high level. Lombardi (2011) stated that a teacher develops conceptual knowledge and manages the content of learning activities in pedagogical settings. According to Anstey (2002) good pedagogy requires a broad repertoire of strategies and sustained attention to what produces student learning in a specific content domain, with a given group of students and a particular teacher. Teachers need to rely on quality educational research for different pedagogical models and strategies; at the same time they have to practise the art and science of teaching themselves, refining it as they go according to their own needs and resources and particularly those of their students. Dynamic pedagogy therefore is the skills and knowledge trainers or teachers use to motivate the learners, plan, implement and evaluate the specialized knowledge/content of cell phone maintenance. The main purpose of the study was to investigate dynamic pedagogies for effective training of youths in cell phone maintenance. Specifically the study sought to determine the:

- 1. Dynamic pedagogies in planning of training for youths in cell phone maintenance
- 2. Dynamic pedagogies in implementing of training for youths in cell phone maintenance
- 3. Dynamic pedagogies in evaluating training of youths in cell phone maintenance
- 4. Motivational strategies required by trainers for their effective performance in training the youths in cell phone maintenance

Research Questions

The following research questions guided the study:

- 1. What are the dynamic pedagogies in planning of training for youths in cell phone maintenance?
- 2. What are the dynamic pedagogies in implementing of training for youths in cell phone maintenance?
- 3. What are the dynamic pedagogies in evaluating the training of youths in cell phone maintenance?
- 4. What are the motivational strategies required by trainers for their effective performance in training the youths in cell phone maintenance?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

- **H01:** There is no significant difference in the mean responses of lecturers and instructors of electrical/ electronic technology in universities on the dynamic pedagogies in planning of training for youths in cell phone maintenance
- **H0₂:** There is no significant difference in the mean responses of lecturers and instructors of electrical/ electronic technology in universities on the dynamic pedagogies in implementing the training for youths in cell



phone maintenance

- **H03:** There is no significant difference in the mean responses of lecturers and instructors of electrical/electronic technology in universities on the dynamic pedagogies in evaluating training of youths in cell phone maintenance.
- **H04:** There is no significant difference in the mean responses of lecturers and instructors of electrical/electronic technology in universities on the motivational strategies required by trainers for their effective performance in training the youths in cell phone maintenance

Methodology

The study adopted a survey research design. A survey research design was described by Ali (2006) as a descriptive study which uses sample of an investigation to document, describe and explain what is in existent or non-existent on the present status of phenomena being investigated. The survey research design was suitable for this study because data were collected from lecturers and instructors of electrical/electronic technology in universities in order to determine dynamic pedagogies for effective training of youths in cell phone maintenance.

The study was carried out in Enugu State of Nigeria. The population for the study was 62 respondents consisting of 46 lecturers and 16 instructors of electrical and electronic engineering from the University of Nigeria, Nsukka, Enugu State University of Technology Enugu State and Institute of Management and Technology Enugu State. There was no sampling because of the manageable size of the population. A structured questionnaire made up of 52 items was developed for collecting data in accordance with the research questions. The instrument was in four sections A-D. section A was centered on Dynamic pedagogies in planning of training for youths in cell phone maintenance, B was for collecting data on Dynamic pedagogies in implementing of training for youths in cell phone maintenance, section C was dwelt on Dynamic pedagogies in evaluating training for youths in cell phone maintenance while D was on motivational strategies required by trainers for their effective performance in training the youths in cell phone maintenance. Each question item was assigned a five point response scale of strongly agree, agree, undecided, disagree and strongly disagree with values of 5, 4, 3, 2 and 1.

Two lecturers from the Department of Vocational Teacher Education and one lecturer from Departments of Electrical and Electronic Engineering all from University of Nigeria, Nsukka validated the instrument for the study. Cronbach alpha reliability method was used for obtaining the reliability coefficient of the instrument. A reliability coefficient of 0.84 was obtained. The 62 copies of the questionnaire were administered on respondents with the help of three research assistants who understand the terrain of study area. Only fifty nine out of 62 copies of the questionnaire administered were retrieved representing 95.16 percent return rate.

The data collected from the study were analyzed using Mean for answering the research questions and the t-test for testing the hypotheses at probability level of 0.05 and 57 degree of freedom. An item with a mean rating of 3.50 or above was regarded as agree while any item with the mean rating below 3.50 was regarded as disagree. The null hypothesis of no significant difference was accepted for any item whose P- value was greater than 0.05, but it was rejected for any item whose P-value was less than 0.05.

Results

The results for the study were obtained from the research questions answered and hypotheses tested through data collected and analyzed.

Research Question 1

What are dynamic pedagogies in planning training for youths in cell phone maintenance?

Hypothesis 1

There is no significant difference in the mean responses of lecturers and instructors of electrical/ electronic technology in universities on the dynamic pedagogies in planning training for youths in cell phone maintenance

The data answering research question one and for testing hypothesis one are presented in Table 1



Table 1: Mean Responses of Lecturers and Instructors on Dynamic Pedagogies in Planning for Training for Youths in Cell Phone Maintenance

N=59

S/N	Pedagogies in planning training in cell phones maintenance	X	P-values	Remarks H0	
1	Structure cell phone maintenance programme (repairing, servicing, upgrading, flashing)	3.56	0.19	Required NS	
2	Arrange the topic or unit sequentially in order of presentation.	3.88	0.13	Required NS	
3	State the objective to be achieved by each topic or unit for each component	3.84	0.21	Required NS	
4	Identify materials needed for training in each unit	3.53	0.14	Required NS	
5	Select relevant method for achieving each unit.	3.62	0.33	Required NS	
6	Identify relevant available material for training in each unit of the cell phone maintenance	3.64	0.34	Required NS	
7	Identify relevant method for teaching each topic or unit.	3.63	0.11	Required NS	
8	Write down the cell phone maintenance concepts, facts and generalization to be learnt.	3.97	0.19	Required NS	
9	Identify competency performance of cell phone maintenance unit needed to develop	3.88	0.29	Required NS	
10	State trainer and learners activities	3.94	0.15	Required NS	
11	Identify appropriate evaluation technique for each content area.	3.61	0.07	Required NS	
12	Arrange a conducive environment for the delivery of the selected sub-topic.	3.92	0.42	Required NS	
13	Select appropriate evaluation method for assessing the level of objective achieves.	3.62	0.13	Required NS	

Keys: $X = Mean \ of \ Respondents$, S = significant, $NS = Not \ significant$, H0 = Hypotheses, $N = Number \ of \ the$ Respondents

The data in Table 1 reveal that all the 13 items had their mean values ranged from 3.53 to 3.97 which are above the cutoff point of 3.50. This shows that all the 13 dynamic pedagogies are required for planning of training for youths in cell phone maintenance. Table 1 also showed that 13 pedagogies had their P-values greater than 0.05 at degree of freedom 57. This indicated that there was no significant difference in the mean responses of lecturers, and instructors on the dynamic pedagogies in planning training for youths in cell phone maintenance. Therefore, the null hypothesis of no significant difference was upheld for all the pedagogies.

Research Question 2

What are dynamic pedagogies in implementing of training for youths in cell phone maintenance?

Hypothesis 2

There is no significant difference in the mean responses of lecturers and instructors of electrical/ electronic technology in universities on the dynamic pedagogies in implementing of training for youths in cell phone maintenance

The data answering research question two and testing hypothesis two are presented in Table 2



Table 2: Mean Responses of Lecturers and Instructors on Dynamic Pedagogies in Implementing Training of Youths in Cell Phone Maintenance

N=59

S/N	Pedagogies in implementing training in cell phones	$\overline{\mathbf{X}}$				
	maintenance		P-values Rem		arks H0	
1	Teach the trainee contents from known to unknown using cell phone maintenance training unit or topics	3.53	0.10	Required	NS	
2	Explain the facilities to be used by the trainer for training each trainee in each competency area of the cell phone maintenance	3.50	0.31	Required	NS	
3	Deliver the content step by step in logical order to the trainers	3.54	0.15	Required	NS	
4	Demonstrate the competencies in cell phone maintenance while the trainee observed during step by step teaching	3.75	0.41	Required	NS	
5	Request the trainee to practice what the instructor demonstrated while the instructor observes them	3.62	0.32	Required	NS	
6	Correct wrong practices made by the trainees	3.51	0.09	Required	NS	
7	Encourage repetitive practice of knowledge and skills learnt	3.03	0.07	Required	NS	
8	Test the practice of a group of related competency towards achieving of the objectives.	3.96	0.71	Required	NS	
9	Provides the trainees information about their performance	3.78	0.11	Required	NS	
10	Encourage visit to other cell phone production or maintenance industries, write a report and submit to the instructor for a feedback system	3.93	0.21	Required	NS	
11	Teach the trainee money management and investment procedure into their enterprise	3.51	0.70	Required	NS	
12	Teach the trainee source of found for investment into the cell phone maintenance enterprise	3.82	0.42	Required	NS	

Keys: $X = Mean \ of \ Respondents$, S = significant, $NS = Not \ significant$, H0 = Hypotheses, $N = Number \ of \ the$ Respondents

The data in Table 2 reveal that all the 12 items had their mean values ranged from 3.51 to 3.96 which are above the cutoff point of 3.50. This shows that all the 12 dynamic pedagogies are required for implementing training of youths in cell phone maintenance. Table 2 also shows that 12 pedagogies had their P-values greater than 0.05 at degree of freedom 57. This indicated that there was no significant difference in the mean responses of lecturers, and instructors on the dynamic pedagogies in implementing training of youths in cell phone maintenance. Therefore, the null hypothesis of no significant difference was upheld for all the dynamic pedagogies in implementing training of youths in cell phone maintenance.

Research Question 3

What are the dynamic pedagogies in evaluating of training activities for youths in cell phone maintenance?

Hypothesis 3

There is no significant difference in the mean responses of lecturers and instructors of electrical/ electronic technology in universities on the dynamic pedagogies in evaluating of training for youths in cell phone maintenance

The data answering research question three and testing hypothesis three are presented in Table 3



Table 3: Mean Responses of Lecturers and Instructors on Dynamic Pedagogies in Evaluating of Training for Youths in Cell Phone Maintenance N=59

Test the practice of a group of related competency towards achieving of the objectives 3.55 0.11 Required NS Evaluate quality of cell phone maintenance instruction using diverse of evaluation techniques Evaluate performance of trainees or youths on cell phone maintenance Applying appropriate evaluation techniques to assess procedural steps of maintaining cell phone Involve trainees or youths in evaluating each other Develop appropriate test and rating sheet for assessing performance of trainees after each unit of cell phone maintenance Identify appropriate evaluation technique for each content area Select appropriate evaluation method for assessing the level of objective achieves Observing trainees while carrying out repair on faulty cell phone Dismantle a faulty cell phone without causing any further damages Learny out project on cell phone Adopt procedure testing for youths when assessing each unit Adopt relevant matching tests for evaluating trainees under cell Adopt relevant matching tests for evaluating trainees under cell Required NS Required NS 3.55 0.11 Required NS Required NS 8.60 0.21 Required NS 1.50 1.51 Required NS 1.51 Required NS 1.52 1.52 1.53 1.54 1.54 1.55		ouths in Cen I none Maintenance				
achieving of the objectives 2 Evaluate quality of cell phone maintenance instruction using diverse of evaluation techniques 3 Evaluate performance of trainees or youths on cell phone maintenance 4 Applying appropriate evaluation techniques to assess procedural steps of maintaining cell phone 5 Involve trainees or youths in evaluating each other 6 Develop appropriate test and rating sheet for assessing performance of trainees after each unit of cell phone maintenance 7 Identify appropriate evaluation technique for each content area 8 Select appropriate evaluation method for assessing the level of objective achieves 9 Observing trainees while carrying out repair on faulty cell phone 10 Use rating scale to asses trainees while maintaining cell phones 11 Dismantle a faulty cell phone without causing any further damages 12 Carry out project on cell phone 13 Adopt procedure testing for youths when assessing each unit 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 3 .60 3 .61 Required NS Required NS 8 .0.27 Required NS 8 .0.27 Required NS 9 .0.41 Required NS 1 Required NS 2 Required NS 3 .60 3 .60 3 .60 3 .60 3 .61 8 Required NS	S/N	Dynamic pedagogies in evaluating the training	X	P-values	Remarks H0	
diverse of evaluation techniques 3.68 0.51 1 Evaluate performance of trainees or youths on cell phone maintenance 4 Applying appropriate evaluation techniques to assess procedural steps of maintaining cell phone 5 Involve trainees or youths in evaluating each other 6 Develop appropriate test and rating sheet for assessing performance of trainees after each unit of cell phone maintenance 7 Identify appropriate evaluation technique for each content area 8 Select appropriate evaluation method for assessing the level of objective achieves 9 Observing trainees while carrying out repair on faulty cell phone 10 Use rating scale to asses trainees while maintaining cell phones 11 Dismantle a faulty cell phone without causing any further damages 12 Carry out project on cell phone 13 Adopt procedure testing for youths when assessing each unit 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 3 .80	1		3.55	0.11	Required	NS
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steps of maintaining cell phone Involve trainees or youths in evaluating each other Develop appropriate test and rating sheet for assessing performance of trainees after each unit of cell phone maintenance Identify appropriate evaluation technique for each content area Select appropriate evaluation method for assessing the level of objective achieves Observing trainees while carrying out repair on faulty cell phone Use rating scale to asses trainees while maintaining cell phones Dismantle a faulty cell phone without causing any further damages Carry out project on cell phone Adopt procedure testing for youths when assessing each unit Award grades to each trainee when carry out practical operations in the workshop Adopt relevant matching tests for evaluating trainees under cell Acquired NS Required NS 3.64 0.45 Required NS Required NS 3.67 0.21 Required NS 3.68 0.27 Required NS Required NS 3.69 0.51 Required NS	3	÷ • • • • • • • • • • • • • • • • • • •	3.58	0.01	Required	NS
Develop appropriate test and rating sheet for assessing performance of trainees after each unit of cell phone maintenance 7 Identify appropriate evaluation technique for each content area 8 Select appropriate evaluation method for assessing the level of objective achieves 9 Observing trainees while carrying out repair on faulty cell phone 10 Use rating scale to asses trainees while maintaining cell phones 11 Dismantle a faulty cell phone without causing any further damages 12 Carry out project on cell phone 13 Adopt procedure testing for youths when assessing each unit 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 3 80 0.54 Required NS	4		3.64	0.15	Required	NS
performance of trainees after each unit of cell phone maintenance 7 Identify appropriate evaluation technique for each content area 8 Select appropriate evaluation method for assessing the level of objective achieves 9 Observing trainees while carrying out repair on faulty cell phone 10 Use rating scale to asses trainees while maintaining cell phones 11 Dismantle a faulty cell phone without causing any further damages 12 Carry out project on cell phone 13 Adopt procedure testing for youths when assessing each unit 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 3 .82	5	Involve trainees or youths in evaluating each other	3.72	0.45	Required	NS
8 Select appropriate evaluation method for assessing the level of objective achieves 9 Observing trainees while carrying out repair on faulty cell phone 3.97 0.22 Required NS 10 Use rating scale to asses trainees while maintaining cell phones 3.50 0.21 Required NS 11 Dismantle a faulty cell phone without causing any further damages 12 Carry out project on cell phone 3.58 0.27 Required NS 13 Adopt procedure testing for youths when assessing each unit 3.62 0.14 Required NS 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 3.80 0.54 Required NS	6		3.82	0.31	Required	NS
objective achieves 9 Observing trainees while carrying out repair on faulty cell phone 3.97 0.22 Required NS 10 Use rating scale to asses trainees while maintaining cell phones 3.50 0.21 Required NS 11 Dismantle a faulty cell phone without causing any further damages 12 Carry out project on cell phone 13 Adopt procedure testing for youths when assessing each unit 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 16 Acard State 3.60 0.51 Required NS 17 Required NS 18 Acquired NS 19 Adopt relevant matching tests for evaluating trainees under cell 3.80 0.54 Required NS	7	Identify appropriate evaluation technique for each content area	3.72	0.23	Required	NS
10 Use rating scale to asses trainees while maintaining cell phones 3.50 0.21 Required NS 11 Dismantle a faulty cell phone without causing any further damages 3.93 0.41 Required NS 12 Carry out project on cell phone 3.58 0.27 Required NS 13 Adopt procedure testing for youths when assessing each unit 3.62 0.14 Required NS 14 Award grades to each trainee when carry out practical operations in the workshop 3.60 0.51 Required NS 15 Adopt relevant matching tests for evaluating trainees under cell 3.80 0.54 Required NS	8		3.63	0.01	Required	S*
11 Dismantle a faulty cell phone without causing any further damages 12 Carry out project on cell phone 13 Adopt procedure testing for youths when assessing each unit 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 16 Ago and a sequired of the sequired operation of the workshop 17 Adopt relevant matching tests for evaluating trainees under cell 18 Ago of the sequired operation of the workshop 19 Adopt relevant matching tests for evaluating trainees under cell 20 Ago of the sequired operation of the workshop of the workshop of the workshop operation of the workshop of	9	Observing trainees while carrying out repair on faulty cell phone	3.97	0.22	Required	NS
damages 12 Carry out project on cell phone 13 Adopt procedure testing for youths when assessing each unit 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 16 Adopt relevant matching tests for evaluating trainees under cell 17 Adopt relevant matching tests for evaluating trainees under cell 18 Adopt relevant matching tests for evaluating trainees under cell 19 Adopt relevant matching tests for evaluating trainees under cell 10 Adopt relevant matching tests for evaluating trainees under cell 10 Adopt relevant matching tests for evaluating trainees under cell 19 Adopt relevant matching tests for evaluating trainees under cell	10	Use rating scale to asses trainees while maintaining cell phones	3.50	0.21	Required	NS
13 Adopt procedure testing for youths when assessing each unit 3.62 0.14 Required NS 14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 3.80 0.54 Required NS	11	· · · · · · · · · · · · · · · · · · ·	3.93	0.41	Required	NS
14 Award grades to each trainee when carry out practical operations in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 3 80 0.54 Required NS	12	Carry out project on cell phone	3.58	0.27	Required	NS
in the workshop 15 Adopt relevant matching tests for evaluating trainees under cell 3.60 0.51 Required NS	13	Adopt procedure testing for youths when assessing each unit	3.62	0.14	Required	NS
	14	, , ,	3.60	0.51	Required	NS
phone maintenance training	15	Adopt relevant matching tests for evaluating trainees under cell phone maintenance training	3.80	0.54	Required	NS
16 Use evaluation questionnaire in the process of assessing trainees 3.57 0.11 Required NS	16			0.11		NS

Keys: $X = Mean \ of \ Respondents$, S = significant, $NS = Not \ significant$, H0 = Hypotheses, $N = Number \ of \ the$ Respondents

The data in Table 3 reveal that all the 16 items had their mean values ranged from 3.51 to 3.93 which are above the cutoff point of 3.50 and this shows that all the 16 dynamic pedagogies are required for evaluating the training of youths in cell phone maintenance. Table 3 also shows that 15 out of 16 dynamic pedagogies had their P-values greater than 0.05 at degree of freedom 57. This indicated that there was no significant difference in the mean responses of lecturers, and instructors on 15 dynamic pedagogies and there was a significant difference in the responses of the two groups of respondents on one pedagogy in evaluating the training of youths in cell phone maintenance. Therefore, the null hypothesis of no significant difference was upheld for 15 pedagogy items and rejected for one pedagogy item.

Research Question 4

What are the motivational strategies required by trainers for their effective performance in training the youths in cell phone maintenance?

Hypothesis 4

There is no significant difference in the mean responses of lecturers and instructors of electrical/electronic technology in universities on the motivational strategies required by trainers for their effective performance in training the youths in cell phone maintenance

The data answering research question four and testing hypothesis four are presented in Table 4



Table 4: Mean Responses of Lecturers and Instructors on Motivational Strategies required by Trainers for their effective Performance in Training the Youths in Cell phone Maintenance N=59

S/N	Motivational Strategies	$\overline{\mathbf{x}}$	P-values	Remarks	ш
-		Λ	r-values		
1	Select qualified and competent personnel as youth trainers in cell phone maintenance	3.83	0.15	Required	NS
2	Pay commensurate salaries and allowances to the trainer as at when due.	3.58	0.31	Required	NS
3	Provide instructional facilities for the trainer for effective training of youths	3.86	0.15	Required	NS
4	Access the level of competency of the trainers through the youths for appropriate reinforcement or re-training	3.17	0.09	Required	NS
5	Give feedback to the trainers on their performance for encouragement and improvement after assessment	3.80	0.34	Required	NS
6	Provide loans for the welfare of the trainers who may require it at affordable interest rate.	3.78	0.13	Required	NS
7	Provide health services to trainers and their spouses at training	3.54	0.12	Required	NS
8	Provide accommodation to trainers and their spouses at training	3.56	0.21	Required	NS
9	Promote trainers regularly based on satisfactory criteria.	3.97	0.17	Required	NS
10	Address the challenges encountered by the trainers during training of youths and provide solution	3.58	0.10	Required	NS
11	Guarantee the freedom and security of the trainer at the training centre.	3.93	0.25	Required	NS

Keys: $X = Mean \ of \ Respondents, \ S = significant, \ NS = Not \ significant, \ H0 = Hypotheses, \ N = Number \ of \ the Respondents$

The data in Table 4 reveal that all the 11 items had their mean values ranged from 3.54 to 3.97 which are above the cutoff point of 3.50. This shows that all the 11 motivational strategies are required by trainers for their effective performance in training the youths in cell phone maintenance. Table 4 also shows that 11 motivational strategies required by trainers had their P-values greater than 0.05 at degree of freedom 57. This indicated that there was no significant difference in the mean responses of lecturers, and instructors on 11 motivational strategies required by trainers for their effective performance in training the youths in cell phone maintenance. Therefore, the null hypothesis of no significant difference was upheld for 11 motivational strategies.

Discussion of Results

The findings of this study revealed 13 dynamic pedagogies in planning of training, 12 in implementing the training, 16 in evaluating activities of training of youths in cell phone maintenance and 11 motivational strategies required by trainers for their effective performance in training the youths in cell phone maintenance. The findings of this study on the professional competency development needs of teachers were in agreement with the findings of Asogwa, Abu and Olaitan (2012) who carried out a study on capacity building needs of lecturers of agricultural education in e-teaching for effective delivery in Tertiary institutions in south eastern Nigeria. The authors found out that lecturers of agricultural education needed capacity building in 19 items on operating computer, 13 items on up loading of text on internet and 11 items on videoconferencing for e-teaching in universities.

The results of this study was also in agreement with the finding of Ebaye (2007) who in a study carried out on competency improvement needs of automobile mechanics teachers in technical colleges in Cross River and Akwa Ibom States, Nigeria found out that the teachers needed improvement in knowledge of subject matter, use of instructional methods, communication skills, laboratory and classroom management and evaluation. The findings of this study was also in agreement with the finding of the study conducted by Sowande (2002) on technical competency improvement needs of metal work teachers in Nigerian colleges of education where he found out that metal work teachers needed eight competency in areas for effectiveness in the field. The finding of this study is in agreement with the assertion of Ogwo and Oranu (2006) who stated that teacher must be continuous learners through improvement programmes. This will ensure that lecturers are retrained to enhance their effectiveness in performing specific teaching activities. The findings of the above researchers in their various research activities helped to support the justification of the results of this study on dynamic pedagogies for effective training of youths in cell phone maintenance.



Conclusion

Youths are seen as active part of population of any country most especially developing nation like Nigeria. Indeed if Nigeria is to be sustained as a viable entity, there must be a very good plan to tap the energy and resourcefulness of the youth population to fast track economic development. In order to actively involve the youths in cell phone maintenance, this study now conducted to determine relevant dynamic pedagogies for effective training of youths in cell phone maintenance. It was recommended that all the pedagogies determined in this study should utilized by trainers when training the youths in cell phone maintenance. It was also recommended that trainers should be motivated using strategies identified in the study.

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